W1TK

The Spark Gap

OCTOBER 1981

Book VII Vol X

Official Journal of the Wellesley Amateur Radio Society

YEAR 30

The club year got off to a good start September 17, with the holding of our 30th Anniversary celebration "Tri-Deca-Fest". The crowd, though smaller than hoped for, was enthusiastic and included Eastern Massachusetts SCM Rick Beebe, K1PAD, who came by specially for the occasion.

Our club president, David Curry, K1TK, was the master of ceremonies for the evening. After his opening remarks, the ARRL film "The World of Amateur Radio" was shown.

Skid Schermerhorn, W1TTY, who was one of the club's founders, gave a brief talk on the club's beginnings back in the 1950's when it was begun as a formal organization of the hams already involved with Wellesley Civil Defense.

A slide show on the club's activities was presented by Nels Anderson, K1UR. Field Day '76 was remembered as well as most of the club's major activities during the last year.

After some closing remarks, Dave Kent's (N2AWG) cake and other refreshments provided by other club members were enjoyed by all present. The door prizes were won by Roger Smith's (W1EOA) xyl and by Dave Goldman, W1YSW.

A good time was had by all and our 30th year was given a good start. □

EVENTS

Our June ARRL VHF QSO Party efforts as reported in the last issue of the Spark Gap paid off with a 10th place finish nationwide as well as first in Vermont. This is quite an accomplishment considering the competition and especially considering that none of our club members participating are regular VHF operators.

Now that we've hit the big time, what lies in the future for our VHF efforts? Well, there is still room for improvements in our equipment and in fact some new equipment did go on line during the September contest as reported in this issue.

Our next VHF contest will be the ARRL VHF Sweepstakes, to be operated in January from W1YK in Worcester. If you are interested in getting involved in these contests, plan now to be there in January. □

Dues Dues Dues...

With the start of the new club year your dues are now due. Please get them in to our treasurer, C.J. McDonald, WB1BUM, 48 Hale Street, Newton Highlands, Mass. 02164 or better yet, come to a meeting and pay him in person. □

Hearabouts....

As speakers for our October 15 meeting we will have David Curry, K1TK and Nels Anderson, K1UR on the subject of Gunnplexers. A demonstration of these 10 GHz full duplex transceivers will be offered as well as a slide show and talk on the technical aspects of operation on this band. Plan on being there for this talk on one of our more exotic bands. The meeting will start around 7:30 pm. □

MEETINGS THIS MONTH:

October 1, 1981 at 7:30 pm.
October 15, 1981 at 7:30 pm.
Intermediate Bldg., Wellesley Hills, Mass.

ACTIVITIES

The town of Wellesley will be celebrating its centennial with a fair and road race to take place the weekend of October 3 and 4. We have been asked to provide communications for the events of these two days and a large number of participants are needed so that we can operate in shifts. If you can be of help, please contact Dick Paret, WA1ZLQ, at 762-5074.

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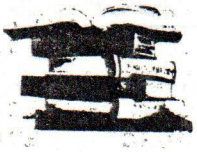
We also have a picnic scheduled with the Middlesex club at the Auburndale Playground, off of Route 30 in Newton on October 4. An attempt is being made to change this date to avoid the conflict with the Wellesley centennial plans. For the latest information on this, please contact one of the club officers. □

education corner



The Wellesley Amateur Radio Society Novice class will begin on Tuesday, October 6 at 7:00 pm. If you know of any prospective Novices who would be interested in this class, have them show up at the club that evening. The instructor for the course will be Arthur Thompson, KA1ENP. □

ELECTRONICS EXCHANGE

For Sale: Kenwood TS-520S transceiver, 160-10 meters with CW filter, external speaker. In excellent condition with original box and manual. Asking $625. Contact Gene Balinski, WA1UXA, at 603-888-1744. □

This column is available to all club members at no charge. Send your ad into the editor, Nels Anderson, K1UR, 32 Westgate Road, Apt. 6, Chestnut Hill, Mass. 02167 or call 323-5029. □

Auctions/Flea Markets

October 4: The 19/79 Repeater Association will hold a flea market at the V.F.W. Post, 150 Bennington Street in the Beachmont section of Revere. Admission is $6.00 for sellers in advance, $8.00 at the door, and $1.00 for buyers. For more information, contact 19/79 Repeater Association, P.O. Box 71, Chelsea, Mass. 02150.

October 10: Don't forget our own WARS Flea Market at the Wellesley High School parking lot. Set up starts at 9:00 am, but please be there early to get ready for the crowds. Admission will be $1.00 for both buyers and sellers. □

hr REPORT

CW will no longer be required of Spanish Amateurs, the December issue of URE Journal is reported to have announced. The Spanish government has apparently decided to abolish the contest for its Amateur licensees with privileges below 30 MHz.

If true, this decision is in direct contradiction to the WARC '79 requirements and could have strong repercussions on reciprocal licensing. Thanks Region 1 IARU News.

hr Report, September 11, 1981□

OFFICERS

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VICE PRESIDENT:
Dick Paret, WA1ZLQ, 762-5074
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The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

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THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS PRIMARY PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, F.C.C. RULES & REGULATIONS CHANGES, AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE "SPARK GAP" AND MAY SENT THEIR ARTICLES (TYPEWRITTEN IF POSSIBLE) TO THE EDITOR-IN-CHIEF OR TO THE CLUB ADDRESS.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION, AND ENCOURAGEMENT OF PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY IS $8. THE CLUB YEAR RUNS SEPTEMBER 1 TO AUGUST 31. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS, OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE:

THE WELLESLEY AMATEUR RADIO SOCIETY
324 WASHINGTON STREET
WELLESLEY HILLS, MASS. 02181

Minutes

Meeting of September 3, 1981:

The meeting was opened at 7:36 pm by President David Curry, K1TK, with 16 present.

The secretary's and treasurer's reports were read.

The 1981/82 club calendar of events was presented and accepted.

The 1981/82 club budget was presented and accepted.

It was announced that a picnic with the Middlesex club normally held during the summer would be held in October at the Auburndale Playground.

It was announced that in the June VHF QSO Party, we placed 10th nationwide amoung all the clubs entered.

Planning for the "Tri-deca-fest" was done.

The meeting closed at 9:01 pm. □

OFFICIAL BULLETIN

Nr 93, dated September 12, 1981:

The meeting of the ARRL Board of Directors in Hartford, September 10 and 11, 1981, was highlighted by acceptance of the recommendations contained in the Long Range Planning Committee Phase Two report. In response to the LRPC report, plans are to be developed for a higher level of ARRL club affiliation providing greater recognition and motivation for clubs with effective programs to protect, promote, and advance Amateur Radio at the local level. Endorsed in principle were the concept of an ARRL Section Manager with broader responsibilities than the present Section Communications Manager position, creation of steering committees to assist directors at the division level and reorganization of ARRL advisory committees to have one member from each division. Options for providing a more continuous ARRL presence in Washington, D.C., are to be studied. A program for training and certification of Amateurs in emergency communication procedures and techniques is to be developed. Material to assist local groups in planning public service operation events is to be published. To encourage technical activity by Amateurs, simple construction projects for club use are to be developed and articles on equipment maintenance and repair are to be sought.

Several petitions and other filings with FCC were ordered. ARRL will petition FCC to extend General Class phone in the 75 meter band to 3860 to 4000 kHz, and to permit beacon stations to operate under automatic control. An earlier action directing that Extra Class phone privileges be sought at 7075-7100 kHz was reversed, so no such petition will be filed. Comments were authorized defending Amateur interests in the further FCC inquiry into radio frequency interference, Docket 78-369.

Several studies were ordered, including the possibility of reduced membership fees for students and the disabled and possible changes in the RST system of cw signal reporting. Complete details on these and other Board actions will appear in November QST. □

VHF CONTEST

by Nels Anderson, K1UR

The September VHF QSO Party, held the weekend of September 12 and 13 did not see a return of the fantastic conditions we saw on 6 meters during the June contest, but with improvements on the other bands, it still amounted to a successful weekend of operating.

We once again traveled to Mt. Equinox in Manchester, Vermont which by now has become well known as our regular haunts during these contests. We experienced the usual Mt. Equinox weather conditions with a little sun, a little rain, and lots of fog. The only real problem the weather presented this time was a brief shower when we were taking down the antennas on Monday morning.

Band conditions were very interesting. On 6 meters, conditions couldn't have been worse. In fact, conditions haven't been worse since we first became serious in these contests, resulting in our lowest score on this band and less multipliers than on 2 meters.

The other bands, however, were better than ever before. Back in June we managed to work Ohio on 2 meters for the first time. This time around, we worked a whole bunch of Ohio stations, plus added some even better DX with perhaps a dozen Michigan stations, several Virginia stations, and even one contact with North Carolina!

The 220 and 432 MHz bands alos provided contacts as far away as Michigan and 432 actually netted us as many sections as we had on 6 meters. These results reflect a more concerted effort to arrange skeds on 220 where we are still using a transmit crystal that puts us in the wrong part of the band, and the new 68 element antenna array on 432 plus an increased power output from around eight watts to over sixty.

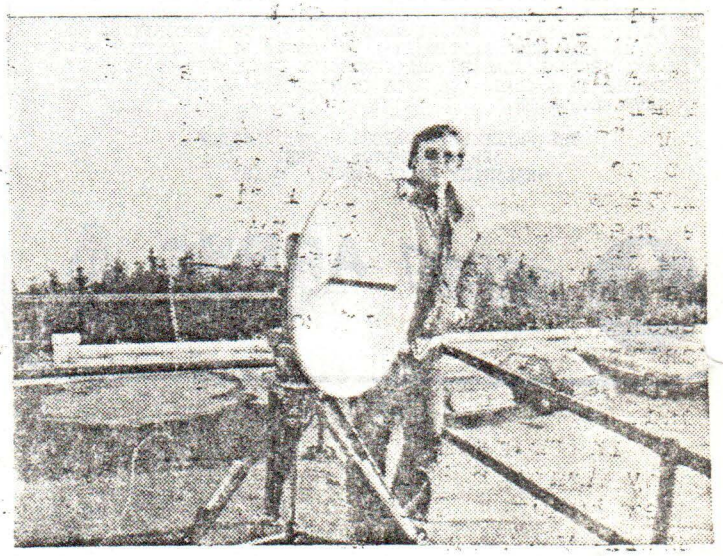
We were off 1296 and 2304 this time as W100P was not able to make the trip but we were on 10 GHz again, and got three contacts in three sections on this band.

The detailed breakdown by bands is as follows:

BAND	QSOs			Points	Mult.
50 MHz.	167	x 1	=	167	20
144 MHz.	382	x 1	=	382	23
220 MHz.	23	x 2	=	46	12
432 MHz.	84	x 2	=	168	20
10 GHz.	3	x 3	=	9	3
TOTAL	659			772	78

60,216 total points

This obviously does not compare with our June results, but is a good 25% better than any of our efforts previous to that. Our improvements on the bands above 6 meters are obvious, and when 6 opens up again, look out!



David Curry, K1TK, operates his 10 GHz Gunnplexer from the balcony of the Skyline Inn.

This score should also be compared with others based on the knowledge that we boycotted the use of FM this time. After observing the mess on FM especially on .52 during the contests we felt that contesting was not a proper use of this mode. This cost us potentially several hundred contacts, especially on 2 meters but with the ever increasing number of people on SSB and CW there are still plenty of contacts to be made. It also had the benefit of making us work harder at 220 MHz CW where we might have missed those 8-land QSOs had we been relying on FM. All in all, the boycott had, for us more advantages than disadvan-

tages.

Taking part in this year's September VHF QSO Party were David Curry, K1TK, Erik Thoresen, K1OGF, Bill Downing, WA1PQY, Dick Paret, WA1ZLQ, C.J. McDonald, WB1BUM, Glenn Brodie, N1ACN, David Kent, N2AWG, and Nels Anderson, K1UR.

The next VHF contest will be the Sweepstakes in January when we will be operating from W1YK in Worcester.□

QSO From Space

by Lee Gordy, WDØCOV

From vast radiation sources at the edge of the universe, electromagnetic waves bathe the Earth. Poised to receive them are huge parabaloid antennas arranged singly or in arrays. Such instruments can "see" far beyond optical telescopes since they can penetrate clouds of interstellar gas. In addition, since they use the radio spectrum, observations are not restricted to the hours of darkness.

Until recently, because of cost, radio astronomy has been restricted largely to professional observatories. Now that condition may be changing. "Home brewed" instruments are being constructed by Amateur Radio operators for a few hundred dollars. Also, the first small commercial instruments are coming on the market.

The typical radio telescope used by an Amateur Radio operator consists of a receiver, recorder and the beam or parabolic antenna system. One supplier, Bob's Electronic Service of Fort Pierce, Florida, markets an economy model called the SRT-7. It is made up of a microampere recorder, D.C. amplifier, U.H.F. receiver and a regulated power supply. The unit utilizes two seven foot dish antennas with bowtie leads. Its price is in the range of a good H.F. transceiver.

Observations are made at very high frequencies. Probably the most frequently used radio source is that of neutral hydrogen at 1420.4 MHz. This corresponds to a wavelength of 21.1 centimeters. Since the element hydrogen constitutes most of the mass of the universe, its signals are carefully monitored. From these data radio maps of the sky are prepared. Signal in the X-ray range provide clues as to where the mysterious dark holes of space may be located.

Amateur Radio has always been arrayed along the frontiers of science. Radio astronomy now opens the way for Amateur Radio operators to try an experience "out of this world". □

hr REPORT

Beacon operation on the new 10, 18 and 24 MHz Amateur bands has been authorized by the FCC for W4MB, Daytona Beach. Using experimental license KK2XJM, he's limited to three watts out for now with 30 watts later if no interference to existing services results. Initial operation will be on 10 MHz in about 30 days.

hr Report, September 11, 1981

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Direct access to the FCC Commissioners will be offered October 7, when the FCC reinstitutes its "en banc" open meeting policy. The en banc meetings were begun under former Chairman Dick Wiley in 1975, in order to provide concerned parties with an opportunity to express to the full Commission their views on communications policy matters.

hr Report, September 11, 1981

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The "plain language" Amateur rules rewrite may be turning out to be a dead issue. In a letter to a Lincoln, Nebraska, Novice (KAØJYZ), Senator Barry Goldwater, K7UGA, stated that, "The rules changes in language have been stopped for the time being, and I think when we get better acquainted with the new head of the FCC we can forget all about them.

With the ARRL and many individual Amateurs lukewarm or even opposed to the rewrite as proposed, the Goldwater opposition may very well be the signal of its demise.

hr Report, September 11, 1981□

WELLESLEY AMATEUR RADIO SOCIETY
1981/82 CALENDAR

September 3: Business meeting (budget, calendar, flea market)
September 12-13: VHF QSO Party, Mt. Equinox, Vermont
September 17: 30th Anniversary "Tri-Deca-Fest" meeting

October 1: Business meeting (Natick Mall, SET, flea market)
October 10: Flea Market, Wellesley High School
October 15: Meeting--Gunnplexer talk by K1TK and K1UR
October 18: Simulated Emergency Test (SET)

November 5: Business meeting (Natick Mall)
November 19: Meeting--guest speaker to be announced

December 10-13: Natick Mall Message Fair

January 7: Business meeting (VHF contest, marathon, auction)
January 9-10: VHF Sweepstakes at W1YK, Worcester, Mass.
January 21: Meeting--guest speaker to be announced

February 4: Business meeting (marathon, auction)
February 18: Meeting--guest speaker to be announced

March 4: Business meeting (marathon, auction, nomination of officers)
March 18: Meeting--guest speaker to be announced

April 1: Fox Hunt
April 15: Business meeting (marathon, auction)
April 17: Auction, Wellesley High School
April 19: B.A.A. Boston Marathon

May 6: Business meeting (Field Day, VHF contest)
May 8: Wellesley Teachers Association Bike-A-Thon
May 20: Meeting--guest speaker to be announced, elections

June 3: Business meeting (Field Day, VHF contest)
June 12-13: VHF QSO Party, Mt. Equinox, Vermont
June 17: Pizza party and final Field Day planning
June 26-27: Field Day

July 15: Summer meeting

August 19: Summer meeting